UNITED STATES DEPARTMENT OF AGRICULTURE
UMPQUA NATIONAL FOREST
P.O. BOX 1008, ROSEBURG, OR 97470, (503)672-6601

December 4, 1991

Dear Reader:

Enclosed you will find the Decision Memo and Amendment No. 1 for the Umpqua National Forest's Land and Resource Management Plan. Also included are the replacement pages related to the amendment changes.

DOYLE WARD
Planning Staff Officer

Enclosures

Decision Memo
Forest Plan Amendment No. 1

Umpqua National Forest
Lane, Douglas, and Jackson Counties, Oregon

The purpose of Amendment No. 1 to the Umpqua National Forest Plan is to update and clarify direction in the Standards and Guidelines concerning the type of woody material remaining on site after timber harvest activities. Soil Productivity Standard and Guideline (S&G) 4 and associated Table IV-16, Specifications for Large Woody Material, have been revised. The S&G and the Table appear on pages 68 and 69 in Chapter IV of the Umpqua National Forest Plan.

The changes are:

1. To **S&G #4**: Change the first sentence to read, "Site specific prescriptions should be developed prior to timber harvest to identify large woody material needed to maintain long-term site productivity following regeneration harvest, catastrophic salvage, and site preparation in all forest ecoclasses." Also, add the words "are first priority to be left" to the clarifying statement found in parenthesis on line 8. The statement should now read, "(green culls and/or snags are first priority to be left)".

2. To **Table IV-16**: Change footnote 2 to read, "Un-utilized cull logs, green cull trees and snags left on-site are first priority."

3. To **Table IV-16**: The first block under "Unit of Measure" is changed to "Avg. Linear Ft/Ac".

4. To **Table IV-16**: Change footnote 6 to read, "When the amount and size of standing and down available cull logs, cull trees, and snags are less than the above required standards, then the next largest material should be left on the site. In this case, material down to 8" (small end) diameter for all ecoclasses can be used to meet the standard. Where this material is not available, or when per acre material (PAM) sold may make the material unavailable as large woody material, standing green trees or otherwise merchantable material will be left to meet the 250 average linear feet per acre standard. The trees to be left will be at least 20" DBH, unless not available. When 20" DBH or larger material is not available, trees of the average stand diameter should be selected. Length will be estimated from the ground line to an 8" top in order to achieve the 250 linear feet."

Soil Productivity Standard and Guideline #4 and Table IV-16 have been revised to show these changes and are included with this document.

Large woody material (LWM) "provides sites for a wide variety of flora and fauna that are part of the essential network of nutrient recyclers and nitrogen accumulators." (S&G #4). Further, the role dead, decaying woody material plays in site productivity is discussed by Perry in a recent unpublished report, "*The Ecology of Coarse Woody Debris in Pacific Northwest Forests: Overview, and and the Role of Down Logs in Ecosystem Processes*" (no date). As projects were developed and implemented using the LWM specifications from Table IV-16, it

was found that in some instances not enough material was available from the other than merchantable components to meet LWM needs. In order to meet minimum LWM needs, it may be necessary to ensure that standing merchantable trees and/or downed merchantable logs are left after harvest.

In most cases, recruitment of large woody material is expected to come from un-utilized cull logs, green cull trees, and snags. The impacts on other resource outputs from leaving merchantable wood is estimated to affect the annual ASQ by less than one-half of one percent (0.5%). Therefore, the effect on the availability of merchantable wood for harvest is expected to be small. Monitoring the amount of merchantable material left on site will enable an evaluation of the impacts across the Forest.

Meetings were conducted with interested publics and resource specialists to develop this amendment.

I have determined the proposed changes are nonsignificant since they will not alter the multiple-use goals and objectives for long-term land and resource management.

Adoption of this amendment will not significantly change the Forest-wide environmental impacts disclosed in the Umpqua National Forest Plan Final Environmental Impact Statement (FEIS). This amendment is categorically excluded from further documentation in an EIS or environmental assessment (FSM 1952.2 and FSH 1909.15-91-1). I find that no extraordinary circumstances exist concerning these changes.

Implementation of this decision shall not occur within 7 days following publication of the legal notice of the decision in the Roseburg News Review.

This decision is subject to appeal pursuant to 36 CFR 217. Any written Notice of Appeal of this decision must be fully consistent with 36 CFR 217.9 (Content of a Notice of Appeal) and must include the reasons for appeal. A written Notice of Appeal, in duplicate, must be filed with the Reviewing Officer, John Butruille, Regional Forester, Pacific Northwest Region, 333 SW First St., P.O. Box 3623, Portland, Oregon 97208, within 45 days of the date legal notice of this decision appears in the Roseburg News Review.

For further information, contact Doyle Ward, Umpqua National Forest, P.O. Box 1008, Roseburg, Oregon 97470.

Lee F Coonce

LEE F. COONCE
Forest Supervisor
Umpqua National Forest

12-3-91

Date

d. Severely burned: A surface soil condition where the top layer has significantly changed color (usually more red) and the next half-inch contains blackened or charred organic matter because of soil heating.

2. To meet acceptable levels of surface soil loss, resulting from gravity, water, or wind action on land dedicated to the production of vegetation, provide for at least a minimum amount of effective ground cover to exist within the first year following the end of a ground-disturbing activity, as specified in Table IV-15.

Table IV-15

Minimum Ground Cover Requirements

Erosion Hazard Class [1]	Minimum Percent of [2] Effective Ground Cover
Low	25%
Moderate	45%
High	65%
Very High	85%

[1] Erosion hazard class ratings should be based on acceptable procedures such as those described in Forest Service Handbook 2509.14.

[2] Effective ground cover is considered to be all living or dead herbaceous or woody materials, synthetic materials, and rock fragments greater than three-fourths of an inch in diameter that is in contact with ground surface and considered to be stable and resistant to downslope movement.

3. Surface organic material (litter, duff and wood) needed to maintain soil productivity, will be planned for all ground-disturbing activities, including post-wildfire activity. Minimum litter and duff needed for mineral soils with cold climatic conditions, low nutrient levels, and/or low water holding capacities will be similar to the amount of effective ground cover needed for soils with high to very high erosion hazard ratings. (See Table IV-15.)

4. **Site specific prescriptions should be developed prior to timber harvest to identify large woody material needed to maintain long-term site productivity following regeneration harvest, catastrophic salvage, and site preparation in all forest ecoclasses.** This material provides sites for a wide variety of flora and fauna that are part of the essential network of nutrient recyclers and nitrogen accumulators. The amount, condition, and distribution of LWM needed are not clearly established with current research. The recommendations in Table IV-16 reflect the current best estimate based on limited data and experience. Up to 60 percent of the total required woody material may be left as "standing wood" at regeneration harvest (green culls and/or snags **are first priority to be left**). In shelterwood units, up to 100 percent of total required woody material may be left as "standing wood" at initial harvest entry.

5. Soil mass movement potentials shall be evaluated on all project areas. A risk and hazard analysis shall be made by an interdisciplinary team process when there is a chance of triggering mass movement events which either:

   a. Have the potential risk of one or more 300-square-yard and larger mass movement event for a period of 15 years following an activity, or

b. Have the potential hazard to damage life, property, facilities, soil, water, and/or fishery values.

Decisions regarding the nature of the proposed activities should consider the results of this risk-and-hazard analysis and ensure that minimum soil, water, and fish habitat standards and guidelines are met. When management activities would significantly increase the potential risk or hazards in items a. and b., alternative prescription(s) will be developed and evaluated.

Table IV-16

Specifications For Large Woody Material [1]

		Forest Ecoclass	
	Unit of Measure	CH-CW, CD-CP, CF-CR	CM-CL
Minimum residual large woody material[2] [6]	Avg. Linear Ft/Ac.	250 [3]	250 [4]
Standing Wood[6]			
Diameter at small end	Inches	>20"[6]	>10"[6]
Deterioration[5]	Stages	1,2,3,4,5,6	1,2,3,4,5,6
Down Wood[6]			
Diameter at small end	Inches	>20"[6]	>10"[6]
Length	Feet	>10'	>10'
Decomposition [5]	Class	1,2,3	1,2,3

[1] Conifer species preferred but hardwoods acceptable.

[2] **Un-utilized cull logs, green cull trees and snags left on site are first priority.**

[3] 250 linear feet of 20" diameter = 550 cu. ft. = 3,000 bd. ft. = 8.3 tons.

[4] 250 linear feet of 10" diameter = 138 cu. ft. = 750 bd. ft. = 2.0 tons.

[5] Douglas-fir tree and snag deterioration stages and Douglas-fir down wood decomposition classes are described in Figure IV-2, Appearance and Relationship of Trees and Snag Stages Relative to Log Decomposition Classes, and Table IV-17, Physical Characteristics of Down Wood Decomposition Classes to be Applied to All Conifer Species adapted from "Management of Wildlife and Fish Habitats of Western Oregon and Washington," USDA Forest Service, R6 - F&WL, 192-185, June, 1985, Chapter 8.

[6] **When the amount and size of standing and down available cull logs, cull trees, and snags are less than the above required standards, then the next largest material should be left on the site. In this case, material down to 8" (small end) diameter for all ecoclasses can be used to meet the standard. Where this material is not available, or when per acre material (PAM) sold may make the material unavailable as large woody material, standing green trees or otherwise merchantable material will be left to meet the 250 average linear feet per acre standard. The trees to be left will be at least 20" DBH, unless not available. When 20" DBH or larger material is not available, trees of the average stand diameter should be selected. Length will be estimated from the ground line to an 8" top in order to achieve the 250 linear feet.**